THE KENTUCKY INTERNET2 INITIATIVE

INTERNET2®
The KY Internet2 Initiative

"Internet2 has provided the opportunity for our staff and students to learn and grow professionally in a global environment through the use of cutting-edge tools and applications. By connecting with experts or peers, Internet2 has opened up the world for our students to mutually communicate and collaborate with others to increase knowledge and solve problems. Our students can see the world through Internet2."

Dr. Tim Smith
Chief Information Officer
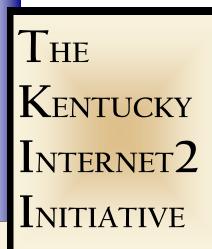Frankfort Independent Schools

Our Vision

- To develop a seamless education-centric network that will grow and scale to meet new, increasing, and unforeseen needs to support equitable life long learning for all Kentuckians.

- To break down the physical and political barriers between secondary and postsecondary education.

- To share learning content and resources throughout P-21 both virtual and physical.

EVERY CHILD
PROFICIENT & PREPARED FOR
S U C C E S S
KENTUCKY DEPARTMENT OF EDUCATION

EPSB
Education Professional
Standards Board www.kyepsb.net

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Council
on Postsecondary Education

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http://i2.ky.gov

INTERNET2®

http://www.internet2.edu

For more information email: Internet2@ky.gov

Kentucky
UNBRIDLED SPIRIT™

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What is Internet2?

Led by the research and education community since 1996, Internet2 promotes the missions of its members by providing both leading-edge network capabilities and unique partnership opportunities that together facilitate the development, deployment and use of revolutionary Internet technologies. By bringing research and academia together with technology leaders from industry, government and the international community, Internet2 promotes collaboration and innovation that has a fundamental impact on the future of the Internet. Internet2 is a not-for-profit advanced networking consortium comprising more than 200 U.S. universities in cooperation with 70 leading corporations, 45 government agencies, laboratories and other institutions of higher learning as well as over 50 international partner organizations.

Who has access to Internet2 in Kentucky?

University of Kentucky and University of Louisville are existing members of Internet2 having access to the Internet2 backbone.

The Sponsored Education Group Participants (SEGP) program, initiated in 2001, allows expanded access to the backbone for state and regional networks, through sponsorship by Internet2 university members. State and regional networks may include non-profit and for-profit K-20 educational institutions, museums, libraries, art galleries, or hospitals that require routine collaboration on instructional, clinical and/or research projects, services and content with Internet2 members or with other sponsored participants. In 2005, there were already 33 state K-12/K-20 networks participating when Kentucky joined as the 34th state in the SEGP program under the sponsorship of the University of Kentucky. This opens the Internet2 access to comprehensive universities, KCTCS, K-12, and the Education Cabinet.

What does this mean to education in Kentucky?

Internet2 applications, via high bandwidth and high performance, enable collaboration among researchers, instructors, students and interactive access to information and resources in a way not possible on today's Internet.

http://www.internet2.edu

For example:

1. **K-20 interactive collaboration**—A science teacher in Owsley County can dissect an anatomical specimen for her class, zooming, rotating and putting it back together, and discuss this virtual dissection with researchers at Murray State University and Stanford University in real time.

2. **Resource-sharing**—Math teachers in Taylor County can interactively participate in professional development workshops conducted live from University of North Texas and Western Kentucky University without leaving their classrooms.

3. **Remote instrumentation**—A student in Frankfort High School taking a biology class can operate a microscope located in Lehigh University in real time.

4. **Digital libraries**—A student in Bowling Green can perform simultaneous, intelligent search and retrieval of KET's rich reservoir of videos, Kentucky History Center's oral tapes and artifacts, and Filson Club's photographs as she works on her multimedia assignment on Western Kentucky's history.

5. **Performing arts**—A student of violin in Paducah can audition or take a master class with the Manhattan School of Music via Internet2 videoconferencing with low latency in audio and video transmission.